



DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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**DIVISION OF
OIL, GAS AND MINING**

June 12, 2002

Mr. Mark Dotson
Western Utah Copper Company
1208 South 200 West
Milford, UT 84751

Dear Mr. Dotson:

Subject: Tailings Disposal from Proposed Maria Mine Project, Beaver County

We have reviewed your Plan of Operations and Amendments which were received on June 3, 2002. You plan to dispose of tailings from underground mining at the Maria and Hidden Treasure Mines in Beaver County northwest of Milford in the existing Hidden Treasure mine pit, located in sec. 22, T. 27 S., R 11 W., SLBM. The following features, which you present in the Plan of Operations and Amendments, are relevant to the potential for ground water pollution originating from this project:

1. Ore from underground mining will be crushed and concentrated in a mill using a flotation process. While reagents used in the flotation process exhibit some mild toxicity, the products will be greatly diluted for use in the mill, and will eventually degrade when the dilute solution is released to the environment. The ore and associated rock is mainly oxidized and past production indicates that only about 25% of the ore contained sulfides.
2. Tailings from the milling process will be dewatered to a stackable solid with water content in the range of 6 to 12 percent. Water reclaimed from the tailings will be collected and recycled back into the milling process.
3. Tailings will be disposed of by backfilling the existing Hidden Treasure pit. Bedrock in the pit consists mainly of skarn and quartz monzonite, massive crystalline rocks with little primary porosity. The bedrock is not highly fractured. Exploration drill holes in the vicinity have not encountered ground water, including one drilled to 700 feet total depth.
4. Climate in the area is very dry with average annual precipitation of 9 inches and evaporation significantly higher than precipitation. A run of the Hydrologic Evaluation of Landfill Performance (HELP) model using a thickness of tailings of 500 inches with 22% initial

Mr. Mark Dotson
June 12, 2002
Page 2

moisture content, and a 12-inch cover layer, indicated that no liquid would be discharged from the tailings.

Based on these characteristics, we conclude that the operation as planned does not represent a significant threat to beneficial uses of ground water. Accordingly, the project qualifies for permit-by-rule status and neither a ground water discharge permit nor a construction permit are required. You must notify us if any of the factors cited above change as a result of changing plans or better knowledge of the site characteristics. Western Utah Copper Company would still be held responsible if its activities caused ground water pollution, and accordingly you should manage potential ground water pollutants such as fuels, hydraulic fluids, concentrated reagents, or explosives in such a manner as to prevent or minimize their release to the environment.

Please contact Mark Novak of this office if you have any questions.

Sincerely,



Don A. Ostler, P.E.
Director, Division of Water Quality

DAO:MN:bjr

cc: Southwest Utah Health Dept.
Ed Ginouves, BLM, Cedar City
Tom Munson, DOGM